

South Carolina Ornamental Plant Industry: Impact on the Spread of Invasive Plants



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South Carolina and North Carolina Nurseries

Nursery	Native Plants/ Total Plants	Percent Native Plants	# of Exotic Invasive Plants
LCN	14/87	16%	4
CNF	13/56	23%	7
SGP	30/76	39%	3
WWN	24/54	44%	3
BEN	73/84	87%	3
BWN	37/112	33%	11
ST	15/31	48%	2

Impact of Horticulture Industry

- 3500 exotic species have escaped cultivation in the United States
- Half of these species were introduced for horticulture
- 10 percent of those species are highly invasive



Why are EIS available in nursery trade?

1. Not aware of invasive potential
2. Consumer demand
3. Uniformity in the nursery and landscape
4. Familiar
5. Hardy; can thrive in most landscape soils and sites
6. Fast-growing
7. Easy to propagate



A photograph of a roadside landscape. On the left, a paved road curves into the distance with a few cars visible. A series of utility poles with power lines runs along the road. To the right of the road is a grassy area with several trees, some of which are in full bloom with white flowers. The sky is overcast and grey.

At least 102 Commonly Sold
Nursery Plants are on the List of
Exotic Invasive Plant Species

Commercial Nursery Plants

- Bred for uniformity, large flowers, compact size, pest resistance
- Must be able to thrive in an artificial environment
- Must mature quickly
- Must be able to withstand shipping and transplant





*Invasive Plants of the 13 Southern States**

COMMONLY SOLD IN NURSERIES

Akebia quinata	Lonicera fragrantissima
Clematis ternifolia	Mahonia bealei
Euonymus fortunei	Nandina domestica
Hedera helix	Phyllostachys aurea
Vinca major	Spiraea japonica
Vinca minor	Koelerutaria elegans
Berberis thunbergii	Paulownia tomentosa
Elaeagnus pungens	Poncirus trifoliata
Euonymus alatus	Pyrus calleryana
Lantana camara	Quercus acutissima
Ligustrum japonicum	Cyperus involucratus
Ligustrum lucidum	Miscanthus sinensis
Ligustrum sinense	Ajuga reptans
Pinus thunbergiana	Foeniculum vulgare
	Iris pseudacorus
	Liriope muscari
	Nepeta cataria
	Xanthosoma sagittifolium



*Miller, J.H., E.B. Chambliss and C.T. Barger

South Carolina Nursery & Landscape Association February 2010

THE SOUTH NURSE

South Carolina Nursery & Landscape Association



SCHI 2010

SCNLA Member Profile:
Charlie's Creek

CONTROLLING PROMOTING NAT through Collaboration Effor

FEBRUARY 1-3

CAMP ST. CHRIST
SEABROOK ISLAND

Registration Now O

To view an agenda on-line and
<http://www.dnr.sc.gov/marine/NERR/training/invasive>

WHO: A coming together of professionals in the fields of landscaping, land management, municipal operations, and key members of the general public.

WHAT: A regional workshop to promote action-oriented plant species and promote the use of native alternatives.

Presentations will focus on:

- Connecting the issue of invasive species to the big picture
- Sharing case studies and state-by-state updates on invasive species

Breakout Sessions will focus on:

- Reducing the sale of invasives & promoting the sale of natives
- Moving beyond brochures to target the general public
- Innovative regulatory approaches for controlling invasives
- Forging new partnerships to maximize efficiency and better access to resources and information.

Training Sessions will focus on:

- Early Detection and Rapid Response (EDRR)
- Learn how to identify and manage new coastal invaders (including those invasives moving through the nursery)

Sponsored by
The Southeast National Estuarine Research Reserve
South Carolina Estuarine Research Reserve

FEBRUARY 4

Plants, Plants, Plants

Room 208

1:30 - 2:30

Phasing Out Non-Native Invasive Plants from our Landscapes. *Kari Whitley, South Horticultural Consulting*
Each year in the United States, we suffer from over \$100 billion in economic losses due to the impact of invasive species. Many plants that are commonly grown and used in the horticultural industry have a significant impact on the decline of native populations. This lecture is designed to identify the major invasive plant species in South Carolina and explain the environmental and economic impact of these plants. Non-invasive plants with similar growth habits and design characteristics will be discussed (both native and non-native) to provide landscape alternatives. In addition, this lecture will address ways to eradicate or prevent the spread of invasive plants in landscapes and natural areas. A free copy of the book, *Non-Native Invasive Plants of Southern Forestry: A Field Guide for Identification and Control* (Dr. James Miller, U.S. Forest Service) will be given to each attendee.

2:30 - 3:30

Outstanding Recent Tree, Shrub and Perennial Introductions.

Julia Ehler

A personal selection of recently introduced trees, shrubs and perennials suitable for South Carolina landscapes. Many have been tested and grown in Julia's Upstate garden.

3:30 - 3:45

Refreshment Break.

3:45 - 4:45

What's New in Ruthwoods and Other Small Trees

Deanna J. Worster, North Carolina State University
Small trees are critical elements in residential and commercial landscapes. Dr. Worster will discuss recent developments in the market breeding program, and comment on other non-traditional cultural releases from other programs. She will also highlight some of her favorite small landscape trees, and discuss "what's new" in this important group of landscape plants.

4:45 - 5:30

Native Plants and Songbirds in your Landscape

Bill Strayer, Clemson University & SC Native Plant Society
Choosing native plants for your garden and landscape has a dramatic positive impact on breeding success of songbirds. Some suggested trees, shrubs, perennials and grasses for your consideration.

Caring for the Environment

Ballroom ABC

1:30-2:30

Biological Control of Imported Fire Ants (IFPA)

Steve Congdon, Department of Plant Industry,

Clemson University

Biological control has been investigated as a potential control method for imported fire ants in South Carolina. The presentation will discuss various biological control methods for imported fire ants in South Carolina, including recent research by Clemson and survey in South Carolina.

1 SC Application Recertification Credit

1 NC Pesticide Applicators Recertification Credits

2:30 - 3:30

How to Read a Pesticide Label and Proper Storage

Chick Cave, Cave Farm Supply Service

An overview of all of the most important information on a pesticide label such as personal protective equipment, re-entry intervals as well as proper storage of pesticides on the job as well as off.

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2:30 - 3:45

Refreshment Break.

3:45 - 4:45

Solving Common Turf Problems...without needing a government bailout!

Jason Russell, Spartanburg Community College

Not all common turf problems are considered a pest but can be controlled chemically or non-chemically. We will evaluate many different problems and give practical solutions to help you give a higher quality turf.

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4:45 - 5:45

Attacking Weeds that Refuse to Surrender

Jul Whittle, PhD Clemson University

This presentation will focus on the most difficult to control weeds in the landscape. Understanding the biology of the weed and correct control measures will be the basis of the discussion. Important areas that will be highlighted include the correct herbicide selection, time of year, rate, and important environmental factors that impact the efficacy and safety.

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NM Pro Magazine

June 2007

- Published the voluntary *Codes of Conduct for the Nursery Industry*
- Advocated that our industry:
 - Develop & Introduce Sterile Forms of Invasive Species
 - Select & Market Native Plants with Improved Characteristics
 - Aggressively Promote Alternatives to Invasive Plants



February 2009

“Breaking this cycle of supply and demand for invasive plants can be done creatively without hurting your business.”



Wisteria frutescens 'Amethyst Falls'



- Only Wisteria sold by most nurseries
- Flowers on new growth

Taxodium distichum 'Shawnee Brave'



- 2004 Theodore Klein Plant Award Winner
- Narrow pyramidal growth habit
- Suitable for some urban landscapes

Ilex vomitoria 'Pendula'



- Attracts birds to the garden
- Evergreen with salt tolerance
- Weeping habit

Juniperus virginiana 'Brodie'



Spartina bakeri



- Great for use in marshy areas and in ditches
- Native coastal grass
- Gaining popularity with landscapers and architects

Muhlenbergia capillaris



- Wildly popular
- Easy to grow
- At some nurseries, the number one seller

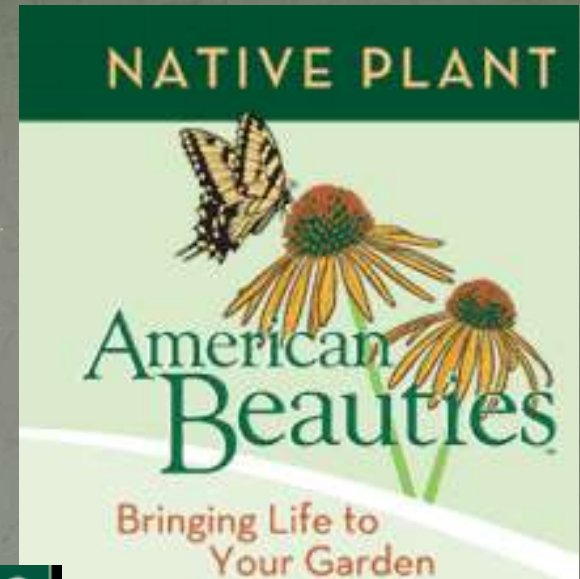
Rhapidophyllum hystrix



- Very cold hardy
- Readily available in nursery trade
- Sun or shade

American Beauties

- Cooperative partnership between the National Wildlife Federation, North Creek Nurseries and Prides Corner Farms
- Marketing a selection of plants native to the Northeastern US
- Grouped into 4 categories – bird, butterfly, dry shade and moist sun gardens
- Portion of each sale goes to the NWF



Monrovia and Dan Hinkley

Monrovia introduces Dan Hinkley Collection

The first items in Monrovia's new [Dan Hinkley collection](#) will be available in early summer 2009. The collection has seven exclusive and semi-exclusive varieties, including a frost-hardy *Abutilon*, four fuchsia, a winter-hardy *Disporopsis* and a red-leafed *Mukdenia*. Dan Hinkley is a renowned plant-hunter and founder of Heronswood Nursery. His collaboration with Monrovia focuses on exotic plants that do not possess the potential for bio-invasiveness.



If you knew better you'd do better

- SC-EPPC, board member
- SCNLA trade show: February 4, 2010 lecture
- Charleston Horticultural Society: March 8, 2010 lecture
- Promotion of non-invasive plants and sustainable horticulture at www.scouthort.blogspot.com